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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/673,494

09/30/2003

Tomokazu Nakazawa

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EXAMINER

KOCZO JR, MICHAEL

ART UNIT

PAPER NUMBER

3746

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/673,494

Applicant(s)

NAKAZAWA, TOMOKAZU

Examiner

Michael Koczo, Jr.

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 2 and 4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5 and 6 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of species B (figures 3 and 4) in the reply filed on February 26, 2007 is acknowledged.

Claims 2 and 4 therefore stand withdrawn from further consideration as being drawn to non-elected species.

Claim Objections

Claim 1 is objected to because of the following informalities: in line 4, "an capacity" should read --a capacity--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The claim recites "the other end [of the piston rod] having a pressure-receiving area as large as an effective pressure-receiving area of the valve element, the piston rod receiving suction pressure from a suction chamber on

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the other end thereof.” There is no detailed description in the specification of how the suction pressure Ps is able to flow to the other end of the piston rod. It is also not understood which area of the valve element is considered as the “pressure-receiving area”. For example, the valve element is exposed to both discharge and crankcase pressures. This lack of a detailed description would impose an undue burden on one of ordinary skill in the art to make and use the invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3, 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, bottom line, there is no reference frame for “side”. What structure forms the sides?

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 5, as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Murase et al (US. 6,217,293) in view of Weber et al (US 6,953,325). Murase et al disclose a capacity control valve for a variable displacement compressor having a valve element 51 and a solenoid 53 to apply force to the valve element. The valve element controls flow between the discharge and the crankcase. However, Murase et al do not disclose a communication passage in

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a valve seat forming member disposed in a refrigerant passage communicating between the discharge chamber and the crank chamber for constantly communicating between the discharge and the crankcase. Weber et al disclose a capacity control valve for a variable displacement compressor wherein a communication passage 18 is formed in a valve housing 5 communicating between the discharge chamber and the crank chamber for constantly communicating between the discharge and the crankcase. This assures constant circulation of lubricating oil from the discharge to the crankcase. In view of this teaching, it would have been obvious to provide the valve seat forming member of Murase et al with a communicating passage connecting the discharge with the crankcase.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murase et al in view of Weber et al, as applied to claim 1 above, and further in view of Suitou et al (US 6,524,077). Suitou et al disclose a capacity control valve for a variable displacement compressor having a "nick" 56b for allowing fluid to bypass the ball valve when it is in its seated position. This nick is functionally equivalent to a separate bypass passage. In view of this teaching, it would have been obvious to provide the valve seat of Murase et al, as previously modified, with a "nick".

Conclusion

The prior art could not be applied to claim 6 due to its basis on a non-enabling disclosure.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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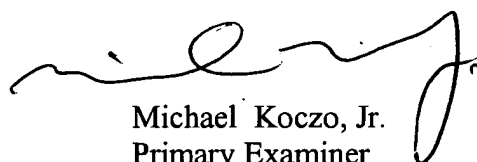
Any inquiry relating to patent applications in general should be directed to the Patent Assistance Center at 1-800-786-9199.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kocz, Jr. whose telephone number is 571-272-4830.

The examiner can normally be reached on M-Th; 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached at 571-272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Kocz, Jr.
Primary Examiner
Art Unit 3746